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Digital media literacy in collaborative and distance work

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Chapter 6: Digital Media Literacy in Collaborative and Distance Work: Building Bridges to Key Organizational Dimensions and Challenges

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In this chapter we address key organizational dimensions and challenges for digital media literacy (DML) in collaborative and distance work. Starting from the insights developed in the LITME@WORK project from a variety of research approaches on DML in collaborative and distance work, we build bridges between the different chapters that cover the following themes: (1) digital media competences in collaborative and distance work; (2) the concept of “newness” in discussions of DML and new ways of working (NWOW); (3) DML as a social construct; (4) implications of collaborative and distance work for well-being; (5) the issue of digital (social) inclusion; (6) the role of technology; and (7) management in team- and distance work. These issues were selected on the basis of their salience in contemporary debates on office work and their relevance for the different theoretical and empirical approaches applied in the project.

In the previous chapters we have approached the issue of DML and collaborative distance work from four angles:

- a comprehensive qualitative analysis of worker practices resulting in the competence matrix, detailed in Chapter 2;
- a qualitative analysis focusing on the way the division of labor in virtual teams and use of technology impact on learning opportunities, based on Modern Sociotechnical Systems Theory (MST), discussed in Chapter 3;
- a quantitative two-wave survey focusing on factors that may impact on learning opportunities within teams (e.g. team trust, consistency in teleworking of virtual teams), presented in Chapter 4;

- a discourse analysis focusing on the way NWOW discourse transforms the practices and subjectivities of office workers, discussed in Chapter 5.

Each of these chapters approached DML from a particular theoretical and methodological vantage point entailing a particular analytical focus. This variety of perspectives generated a multiplicity of insights into the realities of DML in NWOW environments. At the same time, it is important to identify where the analyses align and diverge.

Rather than offering a synthetic conclusion that glosses over the different vantage points articulated in this book, we opted for a concluding chapter addressing seven key issues relevant to each analysis. As such, this chapter builds conceptual and interdisciplinary bridges between Chapters 2 to 5, while recognizing the specificity of each contribution. The resulting discussion is meant to shed light on core issues relevant to contemporary discussions on DML, teamwork and distance work captured under NWOW.

Digital Media Competences in Collaborative and Distance Work

Within the LITME@WORK project, the issue of DML was approached from a variety of complementary disciplinary, theoretical and methodological angles. Such a combination of perspectives is useful to understand competences one needs, to understand what people do *as well as* how they reflect on it. People's ways of thinking and acting are highly context dependent and need to be explained by considering situated practices, organizational structures and factors, as well as the discursive logics at play in organizations.

Defining Competences Anchored in Everyday Practices

The qualitative analysis outlined in Chapter 2 deals with competences from the point of view of office workers. The units of analysis in this approach are positioned at the infra-individual level: the chapter focuses on the practices of individual workers relying on digital tools for collaborative purposes. Inspired by grounded theory principles, this analysis results in a matrix that crosses the activities workers have to perform in collaborative distance work with the dimensions of the work situations they have to take into account. Three types of DML competence indicators were identified on the basis of this matrix:

- the degree of *complexity* in the way workers frame typical distant teamwork situations,
- the *success or failure of one's conduct* towards a typical problem-situation,
- the *(mis)match between this conduct and workers' objectives*.

Five main activity areas were identified as core elements of DML involved in collaborative and distance work: interdependent tasks, team meetings, remote communication, information spaces and document production. Each of these activity areas was then divided into two activities related either to coordination work (preparation

of the tasks) or cooperation work (achievement of the tasks) to emphasize the importance of these two complementary types of work. These two categories of work both involve articulation work, where workers have to develop a mindful posture towards the role played by technology in their work and have to exceed the routine application of technological know-how. Finally, the actions involved in each activity were listed (see details in Chapter 2).

In the matrix, the six dimensions of activities workers have to take into account when collaborating at a distance are identified as follows: tasks, time, space and distance, information, tools and people. Each dimension relates to a set of activity characteristics (e.g. task complexity, task recurrence), grouped under an overarching issue (e.g. task management) workers perceive and reflect on in order to take action when they collaborate. The matrix thus reveals the complexity and diversity of digital media competences involved in collaborative and distance work. It shows that these competences should not be reduced to a particular activity area (e.g. meetings) or dimension (e.g. technology). Instead, the matrix proposes an integrated definition of competences, where different activity areas and activities may be articulated with different dimensions, depending on context specific work-related situations, practices and objectives.

The analysis presented in Chapter 2 offers a comprehensive point of view, grasping the full complexity of work situations from the point of view of workers. Competences are in essence “relational”, in the sense that they can only be understood in relation to worker practices, to objectives, and to the opportunities and constraints of specific work situations. Singling out a particular solution, tool or method adopted in a particular context without taking the whole complexity of the work situation into account could even be counterproductive as this might encourage workers or organizations to adopt such a solution blindly, without a deep comprehension of its meaning and how it may or may not be suitable to their particular context.

However, the observation of competences remains a challenge for researchers and practitioners alike. Efforts should be made to connect evaluation initiatives to worker and team practices in specific work situations. As mentioned in Chapter 2, competences are only observable in concrete performances. A careful analysis of worker practices (what they are doing) as well as of the way workers relate to these practices (what they are saying about what they are doing) is therefore needed. This approach seems to be most promising when trying to embrace the complexity of competences without denying their situated nature.

Competences, Organizational Design and Learning Opportunities

The matrix of DML has been designed to acknowledge the reflexivity of office workers. It puts their capacity to reflect on collaborative work practices at the core of the analysis. This reflexivity should not be seen as an intrinsic characteristic of individuals only, but also refers to the characteristics of the work itself. For example, high work pressures and/

or poor tool design could make it difficult for workers to take a step back and to dedicate cognitive resources to reflections on their practices, even though such reflections are necessary if they are to develop their competences further.

This is where the analysis of worker's practices outlined in Chapter 2 connects with the analysis of their work organization and job content. In the qualitative analysis of virtual teams reported in Chapter 3, the question of acquiring new skills and competences is addressed by considering the division of labor within teams. Based on Modern Socio-technical Systems Theory, the point of departure is that in order for employees to learn, tasks need to be "sufficiently complex to allow for gaining knowledge about cause-effect relations related to the goals of that job" (Achterbergh & Vriens, 2009). When the division of labor in virtual teams is such that the tasks are complex and workers are able to understand cause-effect relations, they can learn new things. This means that the perspective adopted is essentially a *conditional* perspective focusing on the structure of jobs and on the characteristics of tasks, rather than on the people who execute these. The conditions for learning in teams are addressed by analyzing the way the jobs in these teams have been designed and the way technology is used, and not by analyzing the effective use, acquisition and development of competences by the team members.

We observed that the organizational design of teams, analyzed as the division of labor within and between teams, as well as the use of technology, are key determinants that may either foster or hinder the use of knowledge and learning. In teams that are characterized by high levels of division of labor, with fragmented tasks and a lot of control and surveillance by superiors and/or technology, team members have little autonomy and are dependent on others (team members or the team leader) to organize their work and to solve problems that occur during their work. Such a lack of autonomy reduces learning opportunities because it hampers individuals to gain knowledge from cause-effect relations related to the goals of their jobs. Similarly, technology may hinder team members' performance, instead of supporting it, which in turn will limit learning.

In the quantitative analysis of the longitudinal employee survey organized in the case study companies (as reported in Chapter 4) it was concluded that both trust and consistency in hours of teleworking within a team are needed to ensure learning outcomes such as skill development, technical literacy and communication literacy. However, contrary to our initial hypothesis, knowledge sharing within teams as such appeared not a sufficient condition for the development of these literacy dimensions.

Competences in/as Discourse

It is equally important to understand how the notion of competence is understood and mobilized in the discourse of workers and managers themselves. The discourse analysis presented in Chapter 5 did not proceed with an *a priori* definition of (digital media) competence(s) but many interviewees did discuss (interpretations of) ideal-typical competences in NWOW environments. Chapter 5 focused on *accounts about*

worker practices, situations and competences in order to give voice to the office workers themselves and to point at differences between academic and non-academic discourse on competences.

The chapter shows that workers articulate varying degrees and modes of reflexive awareness with respect to (aspects of) NWOW. All contributions to this book recognize the importance of reflexivity to worker subjectivities, practices and discourses but this reflexivity is explored in different ways. In Chapter 2, reflexivity was considered first and foremost as the “capacity to reflect” on “collaborative work practices”. In Chapter 5, reflexivity refers more broadly to the capacity of social systems, discourses, languages and subjects to bend back, act upon and (re-)shape themselves. Even though reflexivity remains a rather opaque phenomenon, social actors may leave traces of subjectivity in language use and communication for others to pick up and engage with. Reflexivity is what enables people to objectify, problematize and criticize patterns in language, discourse and social practice. It allows people to distinguish different meanings given to specific terms and practices, and to recognize and even reshape the interpretive logics informing the meaning of a term such as “competence” (Zienkowski, 2017).

As explained in Chapter 5, both the category of “competence” itself and the labels used for specific competences (e.g. “adaptability” or “being social”) play an important role in the way office workers make sense of themselves, of their work practices and of their work environments. There were principally three ways in which the topic of competence(s) was breached in the discourse analytical interviews. Firstly, the issue of competence(s) was discussed in response to questions that focused specifically on talk about ideal-typical NWOW workers. Secondly, competence(s) popped up during discussions of topics such as hiring practices or the need for additional training. Thirdly, the interviews contain many statements on abstract categories such as “autonomy”, “flexibility” or “productivity”. It was pointed out that such abstractions often operate as competences *and* values simultaneously. The interviews analyzed in Chapter 5 did not include questions focusing on digital media competences specifically.

Most office workers did not discuss competence(s) in terms of concrete abilities. They discussed competence(s) in rather fuzzy terms whose meanings oscillate between concrete know-how on the one hand and broad descriptors for a kind of *savoir-être* on the other hand. It is striking how often interviewees conflated the notion of competence with a limited number of rather abstract work-related values. For instance, office workers frequently stressed that NWOW require them to be flexible, adaptable and/or social but hardly ever discussed such competences in terms of concrete abilities or conduct. Secondly, even when people did talk about more technical know-how or to their jobs in general, they would assess and evaluate the worth of such technicalities in terms of abstract categories. For instance, ICT personnel would point out that even though basic know-how is required, it is at least as important for team members to be “autonomous” in the sense that they should try solving problems on their own, first. At the same time, the ideal-typical coworker should be humble, non-pretentious and sociable enough to ask

for help whenever (s)he cannot solve the issue on her own. Thirdly, our interviewees tend to conceptualize competences as cultural constructs and abstract categories that operate as work-related *values* rather than as descriptors for practical abilities or professional norms. In contemporary office work, the notion of competence operates as a fuzzy term where different non-contradictory meanings are transposed onto each other. Being competent may mean that one has technological know-how, that one has the ability to learn, to adapt oneself, to know how to be a team-player, to be humble, flexible *and/or* to be adaptable.

The different interpretations of the term “competence” are also informed by the interpretive logics office workers rely on in order to articulate themselves. For instance, those who rely heavily on a humanizing logic in order to discuss an ideal-typical NWOW environment are likely to interpret competence in terms of soft skills and *savoir-être* (e.g. “being open”, “being nice”). Those who rely more heavily on a neoliberal discourse might stress the need for people to meet their targets autonomously by regulating their own behavior at a distance. But the meaning of “competence” in these two examples are not incompatible. Such meanings may even co-occur in the discourse of office workers. In fact, the discourse analytical dataset does not contain any traces of struggles over the meaning of “competence”. This observation is already a strong indication of the fact that celebratory NWOW discourse has achieved a rather high degree of hegemonization.

In spite of the fuzziness of “competence”, nobody wants to be seen as *incompetent*. It is here that the socio-political significance of the term resides. The term “competence” carries a legitimizing function for whatever other projects or initiatives it is associated with. In a world of work where results have become the yardstick of success and where management-by-objectives has become a hegemonic mode of governance, competence understood broadly as the competence to meet managerial objectives partially fixes the meaning of a whole set of terms including flexibility, autonomy and trust.

What is Really New in Contemporary Collaborative and Distance Work?

Are the digital media competences involved in collaborative work “new”? Are they connected to “new” practices? Are any of the digital tools used in team and distance work “new”? When observing contemporary office work practices and discourses, the idea of “newness” is central, as reflected in the label “New Ways of Working” (NWOW). In this section, we will interrogate this alleged newness in terms of continuity and change.

Firstly, it is important to stress that distance work is not really new. The first studies on home teleworking appeared in the 1980s (i.e. Pratt, 1984) and show that the issue of distance work has been around for more than thirty years. These studies discussed the implications of teleworking for time flexibility (e.g. its impact on the balance between private and professional time) and productivity. Nowadays, teleworking has spread across

organizations and affects an increasing number of workers. There has also been an evolution in the conceptualization of distance work away from mere home teleworking. Today, distance work encompasses a great variety of work situations, including the use of coworking spaces by employees, internal mobility between sites of a same organization, and work practices of international teams.

Secondly, using digital tools to collaborate is not completely new either. Since the 1980s, the community of Computer Supported Cooperative Work (CSCW) (Schmidt & Bannon, 1992) studied how digital technology and computers can be designed to support team collaboration. Digital tools offer more opportunities to communicate, share information, create documents, etc. Digitalization has had an impact on all aspects of office work. Digital technology has now become so ubiquitous that it is seldom experienced as new. In Chapters 3 and 4, the interviews indicate that most virtual team members do not often consider their communication channels to be new or innovative. The large majority of employees has been well acquainted with these technologies before their teams became virtual. Neither the qualitative analysis of Chapter 3, nor the quantitative survey presented in Chapter 4, contain examples of employees for whom unfamiliarity with new technologies seems to pose considerable problems. At most, technical skills required to work with some of these communication channels, such as video chatting, become more problematic for collaboration with colleagues or superiors over distance. Moreover, office workers sometimes point out that technology related problems often originate in the fact that the technical systems are either malfunctioning or inflexible (see section What is the Role of Technology in Collaborative and Distance Work?, below).

Thirdly, the fact that organizations aim at stimulating teamwork is not a new phenomenon either. The analyses presented in Chapter 2 show that collaboration is strongly encouraged in some organizations that re-organize themselves, adopt new digital tools and rethink their work spaces. At the level of work practices, we see that a significant part of *articulation* work, which was traditionally allocated to team leaders and administrative staff, is now placed on the shoulders of team members. Employees become responsible for organizing tasks because their team is organized virtually: for example, they have to make arrangements to meet team members face-to-face or they have to collaborate with colleagues over distance using ICT. These specific tasks call for a deeper and complex mastery of competences for articulation work by the employees. In other words, collaborative work practices lean towards a greater complexity in a changing work environment where the roles of coworkers, the nature of the tasks, and the tools used are constantly evolving. This situation calls for the development of workers' digital and media competences related to collaborative distance work. These competences will help individuals to adapt to the realities of contemporary office work and to be creative actors in these evolving environments.

Regarding the organizational design of virtual teams and the learning opportunities it might offer, the issue of "newness" may refer to what extent the shift from a collocated to a virtual team (distance collaboration with the use of ICT) requires new *ways of coordination*

and of collaboration between and within teams, which in turn may change the conditions for team members to learn from their work. In this respect, it is first of all essential to stress that the focus of Chapters 3 and 4 was on ICT-mediated distant *teamwork*, which implies a more complex working environment as compared to individual ICT-mediated telework, be it at home or from coworking spaces. A team is a group of individuals who are working together to reach a common goal, are dependent on each other's tasks, and share the responsibility for outcomes. They are viewed by themselves and others as one social entity. In addition, Chapter 3 considered the *degree of virtuality* as a core characteristic of the teams under investigation, defined as the degree to which team members (1) are geographically dispersed and (2) coordinate their activities by means of virtual communication channels.

In research on virtual teams, the additional complexity of virtual teamwork as compared to (individual) telework is acknowledged. This additional complexity refers to increased coordination requirements that emerge when teams shift to distance collaboration. However, mainstream literature seems to focus chiefly on managerial solutions that address this coordination complexity, such as team leadership or team trust, and on technological solutions. The main contribution of the analysis of the case studies presented in Chapter 3 resides in its focus on the extent to which the organizational design of teams enables team members to cope (or not) with the additional coordination requirements that result from virtuality and distance. In this analysis presented in Chapter 3, the organizational design refers to the division of labor, understood as the way operational (productive) and regulation (controlling and decision-making) tasks are divided between and within teams and the allocation of tasks to either technology or jobs within teams.

In the discourse analysis presented in Chapter 5, it was argued that the NWOW techno-managerial apparatus²¹ can be thought of as an *assemblage* that combines a variety of technological and managerial concepts, practices and technologies in a new way (see Foucault, 1977). As we saw before, the constitutive elements of NWOW are not really new. They can often be traced back in one form or another decades before the first texts on New Ways of Working were published. At the same time, one could argue that the novelty of NWOW resides in the unprecedented *scale* and in the coherence with which the elements of NWOW – flexible spatial and temporal work arrangements, participatory management strategies, organizational reconfiguration and enabling ICT's (Ajzen, Donis & Taskin, 2015) are being introduced across organizations, sectors, regions and countries (see Chapter 5). Different kinds of techno-managerial innovations (e.g. distance work,

²¹ In this book, the notions of “apparatus” and “dispositive” have been used interchangeably. Foucault used the term dispositive (sometimes translated as “apparatus”) in order to refer to the “heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions – in short, the said as much as the unsaid”. For him, “the apparatus itself is the system of relations that can be established between these elements” (Foucault, 1977). In the analysis presented in Chapter 5, we proposed to approach NWOW as a Foucaultian dispositive or apparatus that reshapes the subjectivities as well as the practices of office workers.

participatory management, ICTs, etc.) are now articulated with each other in more or less coherent managerial programs that proclaim for specific work-related values. We already pointed out that in a great deal of talk about NWOW, competences function as social values and vice versa. Moreover, in Chapter 5 we have shown that the relative position of competences/values in relation to each other is highly dependent on the interpretive logics social actors rely on in order to make sense of the changing realities of office work.

For instance, in celebratory NWOW discourse the neoliberal logic introduces a notion of “autonomy” understood in terms of self-regulation and management-by-objectives. However, celebratory NWOW discourse also includes a team-oriented participatory logic that values social interaction and decision-making at the team-level. Celebratory NWOW discourse even relies on a humanizing logic valuing competences linked to the realization of social well-being. However, the core logic of celebratory NWOW discourse remains neoliberal. Soft values linked to well-being and participation (e.g. “being open”, “being communicative”) are therefore conditional upon the question whether productivity related goals are met through self-management or not.

The discourse analysis presented in Chapter 5 shows that “newness” operates as a value performing a key ideological function: it allows for the construction of a binary position between old and new worlds of work that maps onto parallel oppositions between distrustful, coercive, hierarchical, administrative/bureaucratic modes of organization on the one hand, and “new” trust-based, autonomy-based, flexible and result-oriented modes of organization on the other hand. The “new” world of work is thereby clearly valued over the old world of bureaucratic “dinosaurs”. The suggestion being that these dinosaurs are relicts of the past bound to disappear over time, even where they are not antagonistically opposed to new ways of working but rather agonistically tolerated. Even though there is a clear tendency to get rid of the “old” ways of working, proponents of NWOW prefer to talk about soft transitions, about evolution rather than revolution. In some public sector organizations where NWOW were being introduced there was a lot of talk about the uneasy coexistence between old and new cultures or worlds of work.

In sum, the different contributions to the LITME@WORK project identify key tensions regarding the concept of newness in relation to DML and NWOW. NWOW discourse proclaims its own newness while valuing it as a selling point that legitimizes a wide array of actors and policies. At the same time, the literature review and the analyses presented in this book highlight the need to consider the historical dimension of contemporary collaborative and distance work.

The Social Construction of Digital Media Literacy

Competences are social constructs but equally inform the social construction of work-related identities, relationships and environments. The four analyses presented in this book have considered the social dimension of DML and New Ways of Working (NWOW) from different theoretical and methodological angles.

The critical discourse study of the managerial logics that reshape the world of office work presented in Chapter 5 was based on radically constructivist principles. Social reality was thereby seen as an outcome of social and political decisions and articulatory practices that may or may not crystallize into institutionalized or sedimented social practices. According to the radically constructivist framework outlined in Chapter 5, social actors engaging in competing practices of articulation attempt to fix (the meanings of) social identities, norms, practices, narratives, subjectivities, social boundaries, and entire societies. As social actors articulate discursive elements with each other they aim to temporarily fix the never-ending play of shifting meanings, of signifieds sliding under signifiers, in order to come to terms with the inherently contingent nature of social reality. Discourse and social reality are mutually constitutive. The idea is that *“our cognitions and speech acts only become meaningful within certain pre-established discourses, which have different structurations that change over time”* (Torfing, 1999).

In Chapter 5 we discussed how NWOW discourse shifts and changes depending on the particular combination of interpretive managerial logics articulated by office workers and managers in order to make sense of changing work cultures. The meaning of signifiers such as “autonomy”, “trust” or “participation” gets socially constructed as social actors articulate these signifiers with other semiotic elements according to specific interpretive logics. Even though individuals are able to become at least partially aware of the discursive patterns they may or may not reproduce, they need to adopt and adapt pre-existing discursive constructs in order to engage in meaningful communication. For this reason, all discourse – both linguistic and non-linguistic – is socially constituted as well as socially constitutive.

From a discursive perspective then, competences are by definition social constructs. They operate as abstract categories that value work-related traits, abilities, practices or categories. A discursive element can only acquire a particular value or meaning in function of its social and communicative use. This goes for the signifier “competence”, but also for specific values/competences such as “productivity”, “flexibility” or “well-being”, and for the actual practices associated with these terms. Such notions therefore operate as *social* values. Like all elements of discourse, competences are both socially constitutive as well as socially constituted.

Interpretative use of competence related terms structures the social practices and social relations of concrete individuals, groups and organizations. Value is always social because it is always relative to the positions and resources of actors positioned in a social field. This means that the valuation of specific competences is highly dependent on the position(s) the supposedly competent person occupies in a specific social field, on the social actors and institutes valuing particular competences, and on the overall constellation of the social field in question. What it means to be competent may also be dependent on one’s specific position in an organization. Moreover, competences need to be co-constructed intersubjectively in concrete work practices. Both the deployment and the recognition of competences are unthinkable in a social vacuum.

Critical discourse theorists consider “normal” social reality to consist of sedimented or crystallized social relationships whose political origins have been all but forgotten. To the extent that the logics constitutive of celebratory NWOW discourse are taken at face value and contribute to a hegemonic sense of normalcy, they are likely to support an associated set of “competences”. Celebratory NWOW discourse does not only celebrate a “new” world of work but also a “new” office worker that has competences that were supposedly not central to office work in the bygone age of a more “administrative” or “bureaucratic” world of work. For instance, the celebratory discourse supports an old/new distinction and a “happy” discourse (Hambye et al., 2013) that legitimizes an entire consultancy industry as well as an entire class of managers and managing practices.

Because celebratory NWOW discourse is not always embraced by all office workers, it is nevertheless useful to distinguish between three groups on the basis of their critical stances with respect to NWOW as noticed in Chapter 5. The first group consists of workers who embrace and rearticulate celebratory NWOW discourse. Doing so, they also reproduce the image of the ideal-typical office worker of celebratory NWOW discourse and the competences that go with it. Among other things, this means that office workers are usually expected to be autonomous, responsible, trusting and result-oriented. The second group of office workers is more critical with respect to specific features of the NWOW project but does not call the overall legitimacy of a transition to NWOW culture into question. Rather, we are dealing with a group that warns against actual or potential perverse effects of implementing NWOW programs. This group tends to display a greater sensitivity to issues and problems that arise in relation to the management of the self. For instance, there is quite a lot of talk on problems linked to the work-life balance, potential burn-outs and other dangers to well-being. This category of office workers tends to be relatively tolerant of colleagues who may not completely fit the image of the ideal typical office worker constructed through celebratory NWOW discourse. Finally, the third group of office workers does challenge key aspects of the logics constitutive of celebratory NWOW discourse. Here, we can think of the office worker discussed in Chapter 2 who articulates a set of competences for public servants as an alternative to the type of competences called for in celebratory NWOW discourse. The notion of “*serving the citizen*” is constructed as a competence or value that is more important and more relevant to public service than a key NWOW value such as result orientation. Nevertheless, as values and competences are social constructs the question remains to what extent radical alternatives for celebratory NWOW discourse exist in public and private organizations. The discourse analytical chapter shows that such alternative ways of conceptualizing the world of work remain relatively rare.

The analyses of work practices and organizational design conducted in Chapters 2, 3 and 4 also considered the social dimensions of practices and organizational structures but did not operationalize the radically constructivist perspective on discourse outlined in Chapter 5. Nevertheless, Chapters 2 to 4 do share the assumption that teamwork and the digital media competences required to practice it are fundamentally “social”.

These competences can indeed only be actualized in contexts where the tasks and the responsibilities of individuals are intertwined with those of other team members. Competences and teamwork get co-constructed in concrete practices. For instance, the analyses of Chapter 2 show that work practices are intertwined with team decisions that are made with respect to the protocols required by the organization, the artifacts team members are supposed to use, and the rules team members have to live by. Moreover, teamwork requires constant collective adjustments throughout the work process. It should also be noticed that digital media competences are not only characteristics of individuals but also of teams. Competences require a shared framing of the situation by individual team members if a collective response is to be formulated. Moments for collective articulation of work and coordination are therefore important in order to co-construct collective framings and responses.

Chapters 3 and 4 consider organizational structures to be the outcome of decisions made by managers, team leaders and team members. The authors recognize that any socially constructed division of labor within an organization or team implies a co-construction of numerous interdependencies and complex coordinative tasks. At the same time, the analysis of the organizational design and learning opportunities in virtual distance work environments was not based on a socially constructivist take on discourse. Rather, team and teamwork were considered as social constructs in the sense that all interdependencies require at least some degree of social coordination. By definition, teams are individuals dependent on each other's tasks. A collective framing and a shared understanding of task-interdependence needs to be co-constructed if principles such as collaboration, trust and collective decision-making are to be realized in virtual teams. This co-constructed interdependence takes a great deal of highly reflexive work. Team members need to recognize recursively that they are interdependent and act accordingly. There is therefore a need for an explicit construction of shared understandings as part of the trust-building and decision-making procedures necessary for successful collaborative practices.

Implications of Collaborative and Distance Work for Well-being

Although competences are often linked to ideas of efficiency and performance, they also touch upon issues of well-being. Well-being at work is studied sometimes in connection with positive elements, such as the motivation to work or the achievement of a certain satisfaction through task performance (Deci et al. 2001), sometimes in connection to the question of how to avoid situations that may increase stress (Edwards, 1992). The literature notes that it is necessary to take rational organizational factors into account—for example, job demand or job control –, but also intermediate (affective) factors related to the personal situation and/or intrinsic psychological motivation of subjects (Mauno, Kinnunen & Ruokolainen, 2006; Page & Vella-Brodrick, 2009). As such, our research can

only address this issue in an incomplete way, because we do not have extensive personal information about the interviewees. Nevertheless, several elements extracted from our work seem interesting to develop here.

From the perspective of organizational design outlined in Chapters 3 and 4, collaborative distance work in virtual teams entails learning opportunities but also comes with psycho-social risks to well-being. Karasek's seminal "job demand-control-support" model (Karasek & Theorell, 1990) posits that job demands, such as the requirement to work under pressure against tight deadlines, to solve complex problems or to interact with colleagues or clients, as well as the job resources required to meet these demands need to be assessed in order to identify risks to well-being. The key job resources for meeting the mentioned job requirements are autonomy at work and support provided by colleagues and superiors. Psycho-social risks emerge from an imbalance between job demands and job resources. In other words, risks emerge when jobs do not provide workers with the means to meet the job demands and do not allow them to solve the problems they encounter during their work.

From a similar line of reasoning, learning opportunities occur when job demands and resources are well balanced and when the job demands can be solved by employees because their jobs provide them with sufficient resources to do so. Karasek's approach to the analysis of psycho-social risks and learning opportunities is essentially a conditional one. This means that the analysis focuses on risks and opportunities of collaborative distance work in virtual teams rather than on effective outcomes. As indicated, the perspective of psycho-social risks at work can be regarded as relevant in research on NWOW. Using the conceptual framework and conditional approach applied to identify learning opportunities for workers, such as reported in Chapter 3, can also enable to identify potential risks for the well-being of workers. The hypothesis guiding such analysis is that those teams that provide team members with ample learning opportunities as well as sufficient support from supervisors and colleagues, will be confronted with less psycho-social risks, while those teams that are characterized with poor learning opportunities and support, will be confronted with higher psycho-social risks.

Additional analyses on the dataset presented in Chapter 4 show that many team members use virtualization as a means of increasing job satisfaction via a greater feeling of independence and a better work-life balance. However, one has to keep in mind that excessive teleworking activities (i.e. more than two-and-a-half days per week; Gajendran & Harrison, 2007) tend to drastically reduce well-being at work. There is no simple explanation for this, as several factors were observed in our study. This can indeed be due to a lack of competence in the management of teams working (partly) at a distance (see Chapter 2). Reductions of well-being in excessive teleworking contexts may also be due to a lack of consideration of the division of labor in the implementation of organizational transformations. It may also be caused by inadequate technical systems obstructing team coordination (see Chapter 3).

The discourse analysis presented in Chapter 5 includes an analysis of the way concerns with well-being get articulated during discussions of NWOW. Celebratory NWOW discourse assumes that the introduction of new techno-managerial techniques will contribute to more well-being at work. The “happy” values articulated in this discourse – for example, transparency, trust, adaptability, participation – can all be interpreted as being informed by a concern and valuation of well-being at work. Such values are often grounded in a humanizing managerial logic. This logic informs a discourse that stresses the importance of social, psychological and/or physical well-being at work. In the humanizing logic, well-being is a top organizational value. In isolation, this logic prioritizes non-economic dimensions of social life in organizational environments. In celebratory NWOW discourse the neoliberal logic remains the core logic though. This means that concerns with well-being can be articulated as long as they do not challenge key neoliberal assumptions.

In the discourse analytical chapter, well-being appeared as a key value among informants who relied on a humanizing interpretative logic in order to make sense of NWOW. In celebratory NWOW discourse it ends up legitimizing NWOW programs. However, many office workers relied on the humanizing logic and its valuation of well-being in order to problematize and mitigate certain perverse effects of NWOW without calling the entire NWOW framework into question. On the bright side, many interviewees stated that increased flexibility in terms of sliding working hours and self-management can lead to less stress and a better balance between work and private life. In addition, many interviewees welcomed NWOW related architectural and/or ergonomic improvements to the work environment. Nevertheless, interviewees also reported negative effects of NWOW related practices and policies on well-being. By relying on a humanizing logic that values well-being, many office workers problematize actual or potential perverse effects of NWOW. For instance, they frequently complained about the way the new office structure leads to ambient noise which creates a degree of auditory discomfort that impacts negatively on concentration, productivity and well-being. Moreover, many office workers expressed a concern with social well-being and a fear that excessive telework might lead to social isolation as well as to problems with the coordination of collaborative tasks. Other concerns related to well-being pertain to feelings of depersonalization in office spaces where the clean-desk principle rules. Similar concerns with well-being can also be observed in Chapter 3. The shift from managers exerting control over office workers to a situation where office workers are expected to monitor themselves is generally welcomed as having a positive impact on stress and psychological well-being. Still, this acceptance is sometimes countered by a feeling of having to be permanently available because of increased demands of flexibility and responsiveness that come with the introduction of ICT systems.

Throughout this book many factors that impact positively and/or negatively on well-being have been pointed out. However, it should be reminded here that well-being was not addressed directly in our research. We therefore suggest that it should be addressed

further and more specifically in other research. For instance, elucidating the relationship between well-being and complexity – that is, the openness of work environments and policies to some forms of adjustment and “*bricolages*” (de Certeau, 1990) – or the effects of consistency on well-being (see Chapter 3) offers interesting avenues to explore further.

Including Workers in NWOW

In the context of discussions on the world of work and digitalization, the notion of inclusion usually appears in the context of discussions on diversity, inequality and vulnerability as they relate to the digital divide(s) in our societies (Brotcorne et al. 2010). In the context of this project we did not focus on the emancipatory effects of collaborative and distance work for one’s inclusion and/or participation at large. We rather focused on the processes whereby office workers get included into the New Ways of Working. This was perhaps most clearly visible in the discourse analytical chapter that examined the way office workers have been recruited into the cultural and techno-managerial apparatus of NWOW through a set of interpretive or managerial logics (see Chapter 5) but the other chapters allow for some observations regarding the inclusion of workers in NWOW as well (see Chapters 2, 3 and 4).

Generally speaking, celebratory NWOW discourse orients itself to office workers who are supposed to include themselves in the new techno-managerial environment of NWOW. It aims to recruit the largest possible number of office workers in managerial transition programs. It is a discourse that aims to interpellate office workers in such a way that they actively inscribe themselves in NWOW culture so that they will identify with its identities, values and modes of working. By zooming into the way office workers relate themselves to celebratory NWOW discourse, to the associated techno-managerial changes, as well as to the interpretive logics underpinning them, we were able to show that most of our interviewees were interpellated by (or “included in”) NWOW. Only a very limited number of office workers engaged in a truly oppositional discourse challenged its key tenets and logics. The vast majority of interviewees accepted celebratory NWOW discourse at face value or engaged in a type of constructive critique on avoidable real and/or potential perverse effects of NWOW. The extent to which office workers are called upon to include themselves with(in) NWOW can also be illustrated with reference to the manifold workshops, conferences and congresses devoted to the subject, events through which a large community of practice has already constituted itself.

To the extent that we can think of the transition to NWOW in cultural terms, the adoption of this new culture implies the development of new forms of subjectivity or *savoir-être*. Office workers have to demonstrate this *savoir-être* in order to communicate the extent to which they have embraced values and/or so called “competences” such as autonomy, flexibility and trust. These modes of being thus become important criteria for deciding if someone does or does not fit with(in) the “new” NWOW culture. The constitutive outside of NWOW is constructed first and foremost in relation to a supposedly

outdated bureaucratic or administrative mode of working. At first sight, the construction of a boundary between two worlds or cultures hinges on a distinction between old and new ways of working (see the section What is Really New in Contemporary Collaborative and Distance Work? earlier in this chapter). However, as several public servants we interviewed recognized, the “old” and the “new” cultures and their associated ways of working can and do co-exist within a single organization. Even in some of the private companies where NWOW were (being) introduced, interviewees remarked that there was at least some resistance to change coming from employees who got “stuck” in old ways of doing things.

As there are different logics structuring celebratory and non-celebratory NWOW discourse, we should consider what these logics imply for the notion of inclusion. Before we do so, it is important to notice that NWOW discourse addresses employees and managers through a particular combination of managerial logics. The hallmark of a managerial logic is that it aims to align the interests, identities and values of office workers with those of the organization at large. Consequently, the different managerial logics informing celebratory NWOW discourse potentially provide different rationalizations for inclusive practices and policies. Let us illustrate this with reference to some of the managerial logics structuring NWOW discourse: the neoliberal, the humanizing and the expressive/consultative logics.

Firstly, even though the notion of neoliberalism is often associated with social fragmentation, individualization and competition, it is also a logic informing a discourse that seeks to interpellate and recruit subjects. As we saw before, a *neoliberal logic* structures celebratory NWOW discourse whenever it holds individual office workers responsible for their autonomous self-management and collaboration in function of reaching the objectives set by management. It informs a discourse that is often happily embraced by employees who interpret this logic in terms of an increased *flexibility* that provides them with a relatively high degree of freedom in the way they organize their work and private life in time and space. As such, even the neoliberal logic can be said to allow for an *inclusion* of diverse work-life balance arrangements, even though such arrangements have never been discussed in terms of inclusion by any of our interviewees.

Secondly, within celebratory NWOW discourse, a *humanizing logic* emphasizes the positive effects of the NWOW techno-managerial dispositive to human *well-being*. However, office workers also draw on a logic of well-being in order to point at potentially perverse effects of the neoliberal managerial logic were it to operate alone. By stressing the importance of physical, psychological and/or social well-being, it offers an argument for adapting orthodox celebratory NWOW discursive practices to the needs of particular (groups of) employees. Ultimately, the humanizing logic allows for an inclusion of a diversity of individuals and groups that might be excluded from the new world of work if the neoliberal logic would be left to operate on its own. Within the humanizing logic, inclusion is implicitly understood in terms of a recognition of particular human

needs and vulnerabilities and the need for an organization to adapt to these needs and vulnerabilities in order to keep everyone on board in a changing work environment.

Thirdly, the “*democratic*” *team-oriented participatory logic* can also be discussed in terms of inclusion. As we noticed before, this is a logic that values autonomous and collaborative *decision-making* processes at the team level. Put differently, employees are incited to include themselves in decision-making processes where decisions on how to reach organizational objectives set by management are to be reached. Whereas some interviewees problematized the lack of inclusion in decision-making processes at higher organizational levels (see our analysis of the pseudo-participatory and authoritative logics in Chapter 5). At any rate, because of its stress on participation, NWOW discourse potentially links up with inclusion in the sense of involvement in democratic decision-making processes and empowerment. The extent to which the techno-managerial apparatus of NWOW actually empowers employees and leads to more equality with(in) organizations very much depends on the overall organizational structure and politics of the organization in question.

The issue of including workers in the new ways of working was addressed in some of the other chapters as well, although more indirectly. For instance, in Chapter 2, the concept of *engagement* refers to the idea that DML must enable workers to engage in meaningful work activities for themselves, their employers and their coworkers. This idea was further developed by introducing the concept of *awareness* in order to emphasize the importance of developing activities that allow for “mutual understanding” in order to guarantee team cohesion. At the team level, inclusion therefore refers to the necessary conditions to be integrated into a work group, even though it is known that distance work involves more individualization (Rosanvallon, 2007).

In addition, it was noted in Chapter 3 that mutual trust and consistency are necessary to ensure learning outcomes. This concept of consistency is interesting in relation to the issue of inclusion of workers in teams. It refers to a good correspondence between the policies, the working structures put in place and the technical systems supporting teamwork, as a condition for the emergence of cohesion within a team. Results show that team members require a certain degree of autonomy for their tasks when they are distance working. This is essential in order to ensure conditions for learning and to avoid negative effects of virtual teams. Also, and this is the counter-side of autonomy, a company culture and organizational practices based on tight control and performance monitoring were identified as leading to poor learning opportunities.

What is the Role of Technology in Collaborative and Distance Work?

The Determinist Discourse on Technology in NWOW

At the outset of the LITME@WORK project, we expected that much NWOW discourse would be marked by technological determinism, understood as a reductionist explanative framework whereby technology is considered to determine social structures and cultural values. This sort of technological determinism is often articulated with(in) a technologically optimistic discourse, presupposing that a rapid and unobstructed technological advancement leads to societal progress. A typical example of this type of technological determinism can be found in the discourse on the “information highways” and the “information society” of the nineties. This discourse celebrated technology as a driver for social, economic, political and/or cultural change (see Lemire, 1999). Considering the importance of ITCs for NWOW, we expected at least a partial reproduction of this optimism and determinism. Instead we observed a high degree of awareness among both managers and employees of the cultural implications and embeddedness of such technologies with(in) the “new” world of work. Moreover, we were able to identify many shared experiences of technological fallibility. Many office workers were also aware of barriers for a successful implementation of collaborative distance work and explicitly discussed the limitations of enabling technologies for NWOW.

This does not mean that technology and digitalization are irrelevant to NWOW programs. Rather, many office workers are at least partially aware of the complex entanglement of culture and technology at the organizational level. With different degrees of explicitness, most of them recognize that NWOW can best be understood as a techno-cultural and/or techno-managerial apparatus. Many office workers recognize that technology is an important enabling factor in the reorganization of work practices and subjectivities but almost none of them put their hopes in technology alone. In fact, when asked explicitly about “competences” required of employees and managers in NWOW environments, most office workers did not talk about technology at all.

In part, the absence of explicit discussions of technological competences in the interviews examined in Chapter 5 might be the result of interviewees and interviewers establishing common ground, with interviewees assuming that the interviewers are either knowledgeable about the technologies used or simply disinterested in the technicalities of everyday work. However, the relative absence of unprompted discussions of concrete ICT usage in these discourse analytical interviews might also be explained with reference to the degree to which these technologies have been normalized in office work. It appears that in most teams, ICT use was already commonplace when NWOW programs were implemented. Whatever explanation might be the correct one, it is important to observe that the competences mentioned are usually formulated in abstract terms. As we

saw before, interviewees often reply with talk about abstract values and *savoir-être* when asked about the competence of the ideal-typical office worker in office environments.

Celebratory NWOW discourse projects a hopeful fantasy, myth or utopia into the future, but our study shows that most office workers do not believe that technology alone will establish an “ideal” NWOW environment. Technology may be an enabling factor to realize a “new” world of work, but in order for change to occur, a broader cultural change is advocated by most proponents of NWOW at all hierarchical levels of the organizations we investigated. In celebratory NWOW discourse we see a core neoliberal logic, often articulated with consultative/expressive, team-oriented participatory, and humanizing logics. But even where aspects of celebratory NWOW discourse are being mitigated and criticized, we see that most interviewees consider culture and technology to be two sides of the same coin. In short, in celebratory NWOW discourse we can observe a shift away from the typical media-determinism that marked much discourse on ICTs in the nineties.

Technology as an Enabler or as a Hindrance:

The Role of Organizational Design

The analysis of the organizational design of virtual teams (see Chapter 3) gives further support for a rejection of a technological determinist perspective on NWOW because the impact of the technological system in the different virtual teams under investigation did not lead to uniform, predictable outcomes. Rather, the way technology impacts on teamwork seems to be highly dependent on the organizational design of the teams and the actual division of labor within the teams, including the allocation of tasks to either technical systems or to jobs. Choices in technology use are related to, and even subjected to, organizational choices rather than the other way around as would be assumed from a technological determinist perspective. In organizations where team members enjoyed sufficient autonomy before they became virtual teams, technical systems such as communication tools and/or information and knowledge-sharing platforms, were introduced with the aim to support distance collaboration. In contrast, in organizations where the shift to a virtual team was accompanied by changes in the division of labor leading to less autonomy and control capacity for the team members, technical systems reduced the team members’ autonomy even further. In these latter team settings, management typically assigned a controlling, surveillance and structuring function to the technical system to secure team performance, such as centralized ICT systems, ticketing-systems, and systems that structure information flows and/or workflows.

In addition, the analysis presented in Chapter 3 supports a rejection of technological optimism. Indeed, while technology is typically advocated as a solution for distance collaboration and coordination, numerous interviewees indicated quite the contrary: technology was often identified as an obstructing factor, generating new problems and disturbances that could not easily be solved by the (less autonomous) team members. As such, technology was often a source of stress. Frequently indicated technological

problems included technical errors, inflexibility of the technical system to enable a quick repair of problems, technical systems imposing highly standardized procedures and an overly strict planning. This view may be echoed in the quantitative analysis of Chapter 4 as well, which evidenced a decrease in communication as teams became increasingly virtual, hinting that team members are reluctant to use technology, possibly because of inconveniences and problems.

Technology as Constitutive Part of Instrumented Practices

In the survey of the employees (see Chapter 4) the use of technology was investigated in relation to the concept of “consistency”, defined as the matching of policies, structures and systems among virtual team members. Consistency can be identified as a key factor for learning outcomes. The use of the same communication channels by all team members was put forward as a key dimension of consistency. The hypothesis was that consistency in the use of communication channels, for instance when all team members use visual chatting, is a condition for coordination and trust building, but also for achieving a shared understanding. However, the analysis did not confirm that inconsistency in communication channels within a team had a moderating effect on the relationship between team virtuality and learning outcomes. The practical consequence of this observation is that team members can indeed use different technological tools to communicate and that such a variety will not impact on their learning.

This being said, tools and technology remain an important issue when collaborating at a distance. Technology changes the nature and characteristics of some tasks (e.g. booking a room by sending an email to a coworker compare to using an online dedicated and shared interface). It may also require additional tasks or render certain tasks unnecessary. In doing so, technology influence the work that has to be done as well as the way it may be done. Workers therefore need to reflect on their (use of) tools. They need to perceive their affordances, to understand how tools might be used in function of specific tasks and objectives, as well as to configure and adapt these tools accordingly. All of this takes up significant work time and these tasks should therefore be recognized as work. In spite of efforts made by designers to develop “natural” interactions with tools, technology is never obvious and requires a certain degree of appropriation by the users. This appropriation work is a condition for a meaningful and reflexive use of those tools. It goes beyond the simple use of the tools as planned by their inventors. Appropriation work also implies that workers should be able to criticize (the way they are supposed to use) tools and to use these tools creatively while integrating them into their own work as well as in the work of the team. If workers have to be able to use tools and adapt themselves to new technologies, they should also be able to adapt the tools and make them usable. Creativity and adaptation are particularly important when tools are not functioning well. In such circumstances, workers need to be able to identify problems and drawbacks as much as they need to be able to find solutions.

In Chapter 2, digital media competences are defined on the basis of an analysis of collaborative work practices as they are developed and experienced by workers. This analysis resisted to define competences on the basis of the tools used to work collaboratively at a distance and their functionalities. Such an approach would have led to a definition aligned with the functionalities of software which are constantly evolving. Instead, an interpretive approach was adopted in order to guarantee the relevance of our results on the long term and to grasp the complexity of collaborative work practices. This approach did not focus on the tools and their functionalities but rather on the ways workers develop and perceive collaborative work practices mobilizing those tools, with an interest for the broader context, their objectives, opportunities and constraints of the work situations. In the DML matrix, “tools” is only one of the dimensions to be taken into account when collaborating. As every dimension listed in our matrix, tools have to be connected to the other dimensions it is important to reflect on how tools might be used differently by coworkers (“people dimension”) or how tools might increase the awareness of deadlines (“time dimension”). Such an approach is different from many other approaches adopted by practitioners and companies. For the same reasons as those explained above (i.e. avoiding the risks of oversimplification and fast obsolescence), a complex approach to collaborative digital media competences seems a stronger option on the long term as it is not tools-dependent and as it encompasses a wider range of issues (social, informational, spatial, temporal). Tools are an easy entry point to those complex topics but may also prevent practitioners and researchers to take a step back and address the “big picture” of collaborative distance work.

Managing Teamwork at a Distance

The analyses presented in this book all focus on the issue of managing teamwork at a distance in different ways and to different degrees. The DML matrix presented in Chapter 2 focused specifically on the digital media competences required for engaging in collaborative and distance work. The issue of management at a distance was treated as an aspect of distance work but was not a key focal point for the authors. The resulting DML matrix allowed for an identification of key competences required for the management of teams at a distance in terms of *coordination work*: collectively allocating tasks; organizing team meetings; organizing means of communication; organizing shared information spaces; and organizing the collective editing of a document. These competences have always played a role in collaboration, but we are now witnessing a shift in the type of actors held responsible for these tasks.

The discourse analysis presented in Chapter 5 showed that the “old” world of work is mostly associated with a manager responsible for these tasks. In the “new” world of work, these tasks are distributed among office workers across the organizational hierarchy. In organizations that transitioned to NWOW, these competences are no longer the exclusive prerogative of team leaders but have become key features of the ideal typical

office worker. For example, the allocation and coordination of tasks through technology is increasingly endorsed by team members, which increases their level of responsibility. This results in an overlap of competences between workers and managers. In this type of work setting, an important issue seems to be the feeling of “trust” workers may or may not enjoy. Trust was frequently mentioned in their descriptions of collaborative practices. The redistribution of the tasks, the competences associated to them, and the experience of “trust” have to be analyzed in light of organizational design choices (e.g. organization of team, degree of collaboration) and discourses that circulate both within and outside the organization.

In the analysis of the organizational design of virtual and distance work presented in Chapter 3, the role of the team leader was addressed as a potential source of tangible and intangible support for team members. Social support refers to the opportunities of team members to receive assistance and advice from their team leader. Social support can strengthen or weaken team members’ control capacity because team leaders can help to solve the problems team members are confronted with, for example through the provision of information. However, social support can be hampered by the difficulties of sharing and communicating information in a virtual context (Cramton, 2001; Schaubroeck & Yu, 2017). The analysis in Chapter 3 (based on Modern Socio-Technical Systems Theory) shows that the role assigned to team leaders can also be counterproductive for team members’ performance. More precisely, the division of labor in *regulatory* tasks (such as planning and coordination of work) is a central element in this respect. In those teams where regulatory tasks were assigned and concentrated with the team leader rather than with the team members, this implied less control capacity for the workers. In such organizational settings, a key role of team leaders is to control team members and to solve the problems they are confronted with during their work. This hampers a smooth workflow because it creates detours, implies loss of time, planning complications and a limited overview of the workflow progress. Interestingly, in teams where we observed such a concentration of regulatory tasks with the team leader, this was often accompanied by an introduction of a technical system that automated at least a part of these coordination related tasks. In turn, team leaders had less of an overview of the team’s actions, experienced difficulties to remain on top of things and faced a general decrease in control capacity as well.

The discourse analysis conducted in Chapter 5 focused on the issue of management at a distance as part of a wider discussion about the cultural transition to new ways of working. Distance work was thereby considered as an organizational technology, part and parcel of an overarching techno-managerial NWOW apparatus. Managing people at a distance is often seen to require the mastery of a trust-based management style that supposedly incites employees to develop and practice their autonomy. Abstract categories such as “trust” and “autonomy” appear in our interviews as valued competences or competence related values.

Most office workers associate distance work with the principle of self-management. But not all discourse about managing teamwork at a distance is the same. Whereas some office workers welcome it as an enabling factor for the construction of a good balance between the world of work and private life, others point rather cynically at the organizational drivers for introducing such changes. The latter group of interviewees tends to explain the introduction of office work in terms of an organizational attempt at rationalization, externalizing the costs of office space, heating and so on to office workers themselves.

If we take a closer look at the way office workers discuss issues related to the management of teams at a distance, we see that most interviewees hold rather negative attitudes towards managers who engage in hierarchical, disciplinary, top-down management styles. Most of them prefer managers who adapt their management style to the NWOW values of result-orientation and autonomy. Of course, this binary opposition between enabling and constraining management styles corresponds perfectly to the binary opposition between new and old ways or worlds of working.

Bibliography

- Achterbergh, J. & Vriens, D. (2009). *Organizations: social systems conducting experiments*. New York: Springer.
- Ajzen, M., Donis, C. & Taskin, L. (2015). Kaléidoscope des nouvelles formes d'organisation du travail: L'instrumentalisation stupide d'un idéal démocratique et collaboratif. *Gestion 2000 : management & prospective*, 31(3), 125-148.
- Brotcorne, P., Damhuis, L., Laurent, V., Valenduc, G. & Vendramin, P. (2010). *Diversité et vulnérabilité dans les usages des TIC. La fracture numérique au second degré*. Brussels / Gent: Academia Press.
- de Certeau, M. de. (1990). *L'invention du quotidien, tome 1 : Arts de faire* (new edn). Paris : Éditions Gallimard.
- Cramton, C. D. (2003). The Mutual Knowledge Problem and Its Consequences for Dispersed Collaboration. *Organization Science*, 12(3), 346–371.
- Deci, E. L., Ryan, R. M., Gagné, M., Leone, D. R., Usunov, J. & Kornazheva, B. P. (2001). Need Satisfaction, Motivation, and Well-Being in the Work Organizations of a Former Eastern Bloc Country: A Cross-Cultural Study of Self-Determination. *Personality and Social Psychology Bulletin*, 27(8), 930-942. <<https://doi.org/10.1177/0146167201278002>>
- Edwards, J. R. (1992). A Cybernetic Theory of Stress, Coping, and Well-Being in Organizations. *The Academy of Management Review*, 17(2), 238-274. <<https://doi.org/10.2307/258772>>
- Foucault, M. (1977). "The Confession of the Flesh" interview. In *Power/Knowledge Selected Interviews and Other Writings* (ed. Colin Gordon), 1980: pp. 194-228.

- Gajendran, R. S. & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, 92(6), 1524-1541.
- Hambye, P., Mariscal, V. & Siroux, J.-L. (2013). Le capitalisme néo-libéral et la réalisation de soi par le travail. In H. Buclin, J. Daher, G. Christakis & P. Raboud (eds), *Penser l'émancipation: offensives capitalistes et résistances internationales* (pp. 87-109). Paris: La Dispute.
- Karasek, R. & Theorell, T. (1990). *Healthy work. Stress, productivity and the reconstruction of working life*. New York: Basic Book.
- Lemire, M. (1999). Les représentations sociales dans le discours public sur les autoroutes de l'information. *Politique et Sociétés*, 18(2), 83.
- Livingstone, S. & Helsper, E. (2007). Gradations in digital inclusion: children, young people and the digital divide. *New Media & Society*, 9(4), 671-696. <<https://doi.org/10.1177/1461444807080335>>
- Mancinelli, E. (2008). e-Inclusion in the Information Society. In *Coursebook. Information Society: From Theory to Political Practice* (NET-IS Network for Teaching Information Society, p. 171-182). Budapest: Gondolat – Új Mandátum.
- Mauno, S., Kinnunen, U. & Ruokolainen, M. (2006). Exploring work- and organization-based resources as moderators between work-family conflict, well-being, and job attitudes. *Work & Stress*, 20(3), 210-233.
- Muracciole, M. & Massé, D. (2018). L'inclusion sociale numérique : le cas de trois dispositifs numériques améliorant l'accès aux droits. *Terminal. Technologie de l'information, culture & société*, (122). <<https://doi.org/10.4000/terminal.2442>>
- Page, K. M. & Vella-Brodrick, D. A. (2009). The "What", "Why" and "How" of Employee Well-Being: A New Model. *Social Indicators Research*, 90(3), 441-458.
- Pratt, J. H. (1984). Home teleworking: A study of its pioneers. *Technological Forecasting and Social Change*, 25(1), 1-14.
- Rosanvallon, J. (2007). *Le travail de coordination à distance : éclatement des collectifs de travail et transformations du travail collectif* (Thesis, Université de Marne-la-Vallée).
- Schaubroeck, J. M. & Yu, A. (2017). When does virtuality help or hinder teams? Core team characteristics as contingency factors. *Human Resource Management Review*, 27(4), 635-647.
- Schmidt, K. & Bannon, L. (1992). Taking CSCW seriously. *Computer Supported Cooperative Work (CSCW)*, 1(1-2), 7-40.
- Torring, J. (1999). *New theories of discourse: Laclau, Mouffe and Žižek*. Oxford: Blackwell Publishers.
- Valenduc, Gérard & Vendramin, Patricia. (2016). *Le travail dans l'économie digitale : continuités et ruptures*. Working Papers.

- van Deursen, A. J. & van Dijk, J. A. (2014). The digital divide shifts to differences in usage. *New Media & Society*, 16(3), 507-526.
- Zienkowski, J. (2017). Reflexivity in the transdisciplinary field of critical discourse studies. *Palgrave Communications*, 3(17007).